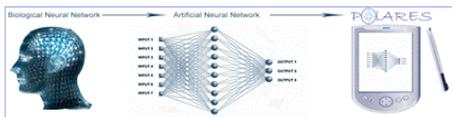


Emergency Preparedness Week



POLARES

Artificial Intelligence Crisis Decision-Making Tool Demonstration

by Reed Hodgkin Tuesday June 9



On Tuesday June 9, at 1:30 PM in Perseverance Hall (B54 - Cafeteria), system developer Reed Hodgkin will demonstrate the latest development in crisis decision-making, the PolARES system. PolARES is a field-portable, decision-support software system, which innovatively combines relational database technology with an artificial intelligence engine in ways not previously attempted. PolARES is readily adaptable in “plug and play” mode to multiple end-user groups, addressing military, homeland security and civilian crisis decision-making environments, including an emergency operations center.

Using a gaming environment for training that induces the user to gain facility with the tools and build the knowledge base through fun and competitive practice, PolARES attacks the knowledge acquisition and experience compression problems directly by automatically growing a nationwide knowledge base of operational and training decision scenarios. Extending and automating a process developed for Incident Commanders in the U.S. Department of Energy, PolARES will implement a field-portable hardware/software system to support key urgent decisions, such as resource deployment and personnel protective actions. Developed through funding by DOE’s Defense Advanced Research Projects Agency (DARPA) and Small Business Innovation Research (SBIR) project, the system will help decision makers rapidly reach correct “fuzzy” decisions in high-stress, multiple-distraction environments. PolARES is a web-based software that applies the recognition-primed model of decision-making, in which observed event characteristics are used to force recognition of a similar scenario from a knowledge base to search all options for the “optimal” answer.

In addition to its primary use as a response asset, the system will employ an innovative approach to training and knowledge distribution.